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Box 1415, Washington, D.C. 20231, on May 5, 2006.

Dated: May 5, 2006

Kevin L. Russell

Atty. Docket No. 1016.0085

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dunklee et al.

Group Art Unit: 2829

U.S. Pat. App. No.: 10/672,655

Examiner: TBD

Filed: September 25, 2003

Customer No.: 00152

Title: PROBE STATION WITH LOW INDUCTANCE PATH

## INFORMATION DISCLOSURE STATEMENT IN ACCORDANCE WITH 37 CFR §1.98

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicants submit herewith twelve sheets of Form PTO-1449 (Modified) listing the patents and non-patent publications of which Applicants are aware and which Applicants desire to have considered by the Patent Office in accordance with 37 CFR §1.97. In accordance with 37 CFR §1.97(c)(2), this Information Disclosure Statement is being submitted after the mailing date of a first Office Action on the merits of the above-identified application. Accordingly, enclosed is the required fee of \$180.

In accordance with 37 CFR §1.97(h), the filing of this Information Disclosure Statement will not be regarded as an admission that any patent or publication or combination of patents

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referred to herein is, or is considered to be, material to patentability under 37 CFR §1.56(b) unless specifically designated as such.

The Examiner is requested to initial Form PTO-1449 and return an acknowledgment copy to the Applicants to confirm that the listed references were received and considered.

The person making this statement is the attorney who signs below on the basis of the information supplied by the inventor and the information in his file.

Respectfully submitted,

CHERNOFF, VILHAUER, McCLUNG & STENZEL

Bv:

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Dated: May 5, 2006

PTO/SB/08A (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
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## **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet of

Complete if Known					
Application Number 10/672,655					
Filing Date	September 25, 2003				
First Named Inventor	Dunklee et al.				
Art Unit	2829				
Examiner Name	TBD				
Attorney Docket Number	1016.0085				

	<u> </u>	Document Number	U.S. PATENT	Name of Patentee or Applicant of	-
Examiner Initials *	Cite No.1	Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Cited Document	Pages, Columns, Lines, Where Relevar Passages or Relevant Figures Appear
-		US- 5,077,523	12/31/1991	Blanz	Figures Appear
		US- 4,115,736	9/19/1978	Tracy	
		US- 3,710,251	1/9/1973	Hagge et al.	
		US- 3,333,274	7/25/1967	Forcier	
		US- 4,856,904	8/15/1989	Akagawa	
		US- 3,185,927	5/25/1965	Margulis et al.	
		US- 3,405,361	10/8/1968	Kattner et al.	
		US- 4,042,119	8/16/1977	Hassan et al.	
		US- 4,383,178	5/10/1983	Shibata et al.	:
		US- 4,694,245	9/15/1987	Frommes	
		US- 4,755,746	7/5/1988	Mallory et al.	
		US- 4,757,255	7/12/1988	Margozzi	
		US- 4,758,785	7/19/1988	Rath	
		US- 4,771,234	9/13/1988	Cook et al.	
		US- 4,845,426	7/4/1989	Nolan et al,	
		US- 4,926,118	5/15/1990	O'Connor et al.	
		US- 5,084,671	1/28/1992	Miyata et al.	
		US- 5,097,207	3/17/1992	Blanz	
		US- 5,220,277	6/15/1993	Reitinger	
	1	US- 5,266,889	11/30/1993	Harwood et al.	1-10-1
		US- 5,309,088	5/11/1993	Vaks	
		US- 5,345,170	9/6/1994	Schwindt et al.	
		US- 5,434,512	7/18/1995	Schwindt et al.	
		US- 5,457,398	10/10/1995	Schwindt et al.	
		US- 5,532,609	7/2/1996	Harwood et al.	
		US- 4,567,908	2/4/1986	Bolsterli	
		US- 4,731,577	3/15/1988	Logan	
		US- 5,382,898	1/17/1995	Subramanian	
		US- 5,461,328	10/24/1995	Devereaux et al.	
		US- 3,289,046	11/29/1966	Carr	
		US- 4,426,619	1/17/1984	Demand	
		US- 4,491,173	1/1/1985	Demand	
		US- 4,503,335	3/5/1985	Takahashi	
		US- 4,691,831	9/8/1987	Suzuki et al.	
		US- 4,734,872	3/29/1988	Eager et al.	
		US- 4,759,712	7/26/1988	Demand	
		US- 4,777,434	10/11/1988	Miller et al.	
		US- 4,784,213	11/15/1988	Eager et al.	
		US- 4,968,931	11/6/1990	Littlebury et al.	
		US- 4,978,914	12/18/1990	Akimoto et al.	
		US- 5,001,423	3/19/1991	Abrami et al.	
		US- 5,006,796	4/9/1991	Burton et al.	
		US- 5,164,661	11/17/1992	Jones	
		US- 5,210,485	5/11/1993	Kreiger et al.	
		US- 5,325,052	6/28/1994	Yamashita	
		US- 4,884,026	11/28/1989	Hayakawa et al.	
		US- 5,550,482	8/27/1996	Sano	
		US- 5,610,529	3/11/1997	Schwindt	
	1	US- 5,663,653	9/2/1997	Schwindt et al.	

	1.10.5.01.10			
	US- 5,101,149	3/31/1992	Adams et al.	
•	US- 5,669,316	9/23/1997	Faz et al.	
	US- 5,670,888	9/23/1997	Cheng	
	US- 5,676,360	10/14/1997	Boucher et al.	
	US- 5,685,232	11/11/1997	Inoue	
	US- 5,811,751	9/22/1998	Leong et al.	
	US- 5,883,522	3/16/1999	O'Boyle	
	US- 5,959,461	9/28/1999	Brown et al.	
	US- 5,963,364	10/5/1999	Leong et al.	
	US- 5,982,166	11/9/1999	Mautz	
	US- 2,389,668	11/27/1945	Johnson	
	US- 3,829,076	8/13/1974	Sofy	
	US- 3,936,743	2/3/1976	Roch	
	US- 4,008,900	2/22/1977	Khoshaba	
	US- 4,038,894	8/2/1977	Knibbe et al.	
	US- 4,049,252	9/20/1977	Bell	
	US- 4,066,943	1/3/1978	Roch	
	US- 4,284,033	8/18/1981	delRio	
	US- 4,531,474	7/30/1985	Inuta	
	US- 4,673,839	6/16/1987	Veenendaal	
	US- 4,899,998	2/13/1990	Teramachi	
	US- 4,904,933	2/27/1990	Snyder et al.	
	US- 5,321,352	6/14/1994	Takebuchi	
	US- 5,479,108	12/26/1995	Cheng	
••	US- 5,481,936	1/9/1996	Yanagisawa	
	US- 5,571,324	11/5/1996	Sago et al.	<del></del>
	US- 5,963,027	10/5/1999	Peters	
	US- 6,002,263	12/14/1999	Peters et al.	
	US- 5,091,691	2/25/1992	Kamieniecki et al.	
	US- 5,410,259	4/25/1995	Fujihara et al.	· · · · · · · · · · · · · · · · · · ·
	US- 6,320,372	11/20/2001	Keller	
	US- 4,786,867	11/22/1988	Yamatsu	
	US- 5,521,522	5/28/1996	Abe et al.	
	US- 5,561,377	10/1/1996	Strid et al.	
	US- 5,604,444	2/18/1997	Harwood et al.	
	US- 6,232,788	5/15/2001	Schwindt et al.	
	US- 6,791,344	9/14/2004	Cook et al.	
	US- 6,842,024	1/11/2005	Peters et al.	
				<u> </u>
	US- 6,843,024	1/18/2005	Nozaki et al.	
	US- 6,873,167	3/29/2005	Goto et al.	
	US- 20050099192	5/12/2005	Dunklee et al.	
	US- 3,609,539	9/28/1971	Gunthert	
	US- 4,978,907	12/18/1990	Smith	
	US- 4,791,363	12/13/1988	Logan	
	US- 5,923,177	7/13/1999	Wardwell	
	US- 5,903,143	5/11/1999	Mochizuki et al.	
	US- 5,680,039	10/21/1997	Mochizuki et al.	
	US- 5,712,571	1/27/1998	O'Donoghue	
	US- 5,646,538	7/8/1997	Lide et al.	
	US- 5,105,181	4/14/1992	Ross	
	US- 3,777,260	12/4/1973	Davies et al.	
	US- 4,342,958	8/3/1982	Russell	
	US- 4,419,626	12/6/1983	Cedrone et al.	
	US- 4,473,798	9/25/1984	Cedrone et al.	
	US- 4,675,600	6/23/1987	Gergin	
	US- 4,739,259	4/19/1988	Hadwin et al.	
	US- 5,105,148	4/14/1992	Lee	
	US- 5,303,938	4/19/1994	Miller et al.	
	US- 5,336,989	8/9/1994	Hofer	
	US- 5,369,370	11/29/1994	Stratmann et al.	
	US- 5,371,457	12/6/1994	Lipp	
		2/20/1996	Habu	
	US- 5,493,070			
	US- 5,508,631	4/16/1996	Manku et al.	
			Manku et al. Nelson et al.	

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US-5,086,092 B201908 Azamat et al. US-5,085,195 VITPINBB Azamat et al. US-6,085,195 VITPINBB Azamat et		rr-	T ::	1 202		
U.S. 5,891,743	14	<b></b>	US- 5,798,652	8/25/1998	Taraci	
U.S. 5,964.358		,		11/17/1998		
US-6232789			US- 5,861,743	1/19/1999	Pye et al.	
US-3645169   37/1972   Weeler   US-300.009   17/19767   Evance   US-4001.685   14/1977   Roch   US-4001.685   14/1977   Koutenik   US-4001.685   14/1977   Koutenik   US-401.685   14/1977   Koutenik   US-4116.523   929/1978   Caberly et al.   US-4116.523   929/1978   Caberly et al.   US-4116.523   929/1979   Caberly et al.   US-4116.523   110/19789   Factwell   US-416.692   717/1979   Tactwell   US-416.692   717/1979   Tactwell   US-416.692   717/1979   Tactwell   US-416.692   717/1979   Tactwell   US-416.692   Tactwell   US-416.692   Tactwell   US-416.692   Tactwell   US-416.692   Tactwell   US-416.692   Tactwell   US-416.693   Tactwell   US-416.693   Tactwell   US-400.495   Tactwell   US-400.495   Tactwell   US-400.495   Tactwell   US-400.495   Tactwell   US-400.495   Tactwell   US-400.495   Tactwell   US-400.695   US-400.695   Tactwell   US-400.695   Tac		1 1	US- 5,594,358	1/14/1997	Ishikawa et al.	
US- 3,530,809   169/197   Evans   US- 4,003,523   71/1977   Roch   US- 4,003,523   71/1977   Roch   US- 4,003,523   71/1977   Roch   US- 4,151,455   424/1579   Coberly et al.   US- 4,151,455   424/1579   Lent   US- 4,151,455   424/1579   Lent   US- 4,161,622   1000/1984   Algo   US- 4,680,526   17/197199   Tacked   US- 4,680,526   17/197199   Rad   US- 4,680,526   17/197199   Rad   US- 4,680,526   17/197199   Rad   US- 4,680,526   17/197199   Rad   US- 4,680,526   17/197199   Detav et al.   US- 5,340,571   627/1994   Clutro et al.   US- 5,340,571   627/1994   Clutro et al.   US- 5,340,571   US- 5,340,571   US- 5,340,571   US- 5,340,571   US- 5,340,572   US- 5,			US- 6,232,789	5/15/2001	Schwindt	
US-4,001,885			US- 3,648,169	3/7/1972	Wiesler	
US-4,035,723			US- 3,930,809	1/6/1976	Evans	
US-4,035,723				1/4/1977		
U.S. 4.15,223   9/20/1976   Lonz						
US-4,151,465			<del></del>	<del></del>		
US-4,161,682		<del></del>				
U.S. 4,800,223 10330/1984 Ago U.S. 4,783,625 11/19798 Harry et al. U.S. 4,886,525 11/197989 Reid U.S. 4,886,525 11/197990 Drake et al. U.S. 4,886,525 11/197991 Drake et al. U.S. 5,334,931 8/2/1994 Clarke et al. U.S. 5,334,931 8/2/1994 Clarke et al. U.S. 5,346,935 11/197990 Paters U.S. 5,680,027 11/197990 Paters U.S. 5,680,027 11/197990 Paters U.S. 5,680,027 11/197990 Paters U.S. 6,002,263 12/14/1999 Paters U.S. 6,002,263 12/14/1999 Paters U.S. 6,232,790 51/15/2001 Bynan et al. U.S. 6,232,790 51/15/2001 Bynan et al. U.S. 6,232,790 51/15/2001 Bynan et al. U.S. 6,943,667 3/28/2000 Cadovalader et al. U.S. 6,943,667 3/28/2000 Cadovalader et al. U.S. 6,114,191 8/29/2000 Laforer et al. U.S. 6,114,191 8/29/2000 Cadovalader et al. U.S. 6,114,191 8/29/2000 Laforer et al. U.S. 6,237,197 8/15/1983 Relitinger U.S. 6,237,197 8/15/1983 Relitinger U.S. 6,228,494 11/11/1994 Diggrame U.S. 6,228,494 11/11/1994 Diggrame U.S. 6,228,494 11/11/1994 Shahor et al. U.S. 6,561,585 10/11/1995 Shahor et al. U.S. 6,561,585 10/11/1996 Barnes et al. U.S. 6,561,585 10/11/1996 Faderin et al. U.S. 6,561,585 10/11/1996 Diggrame et al. U.S. 6,603,793 11/1999 Obliane et al. U.S. 6,803,793 11/1999 Obliane et al. U.S. 6,803,793 11/1999 Obliane et al. U.S. 6,803,803 2/29/2000 Streib et al. U.S. 6,803,803 2/29/2000 Streib et al. U.S. 6,803,803 2/29/2000 Streib et al. U.S. 6,803,803 2/29/2000 Horner et al. U.S. 6,803,803 2/29/2000 Streib et al. U.S. 6,803,803 2/29/2000 Streib et al. U.S. 6,803,803 2/29/2000 Horner et al. U.S. 6,803,803 2/29/2000 Horner et al. U.S. 6,803,803 2/29/2000 Fereirs et al. U.S. 6,803,803 2/29/2000 Streib et al. U.S. 6,803,803 2/29/2000 Streib et al. U.S. 6,803,803 2/29/2000 Horner et al. U.S. 6,803,803 2/29/2000 Fereirs et al. U.S. 6,803,803 2/29/2000 F						
U.S. 4,783,625   11/8/1988   Harry et al.		<b></b>				
US-4,888,550   12/19/1989   Reid   US-4,894,512   1/16/1989   Drake et al.   US-5,334,931   8/2/1994   Clarke et al.   US-5,334,931   8/2/1994   Clarke et al.   US-5,334,931   8/2/1994   Clarke et al.   US-5,340,555   10/29/1989   Frick et al.   US-6,002,263   17/1989   Paters   US-5,963,027   10/5/1989   Paters   US-6,002,263   12/14/1999   Paters   US-6,002,263   12/14/1999   Paters   US-6,232,790   5/15/2001   Bynan et al.   Yasakine   US-6,232,790   5/15/2001   Bynan et al.   Yasakine   US-6,043,667   3/22/2000   Cadavalitader et al.   US-6,114,419   8/22/2000   Letever et al.   US-6,114,419   8/22/2000   Letever et al.   US-6,144,414   7/23/2002   Hollman et al.   US-6,424,141   7/23/2002   Hollman et al.   US-5,202,777   8/15/1993   Reilinger   US-5,202,777   8/15/1993   Reilinger   US-5,202,777   8/15/1993   US-5,278,494   1/11/1994   Obigane   US-5,646,975   1/23/1996   Shamoullian et al.   US-5,517,111   S/14/1996   Shelor   US-5,517,135   US-5,517,139   Shelor   US-5,517,139   Shelor   US-5,617,239   1/5/1998   Feptimin et al.   US-5,668,470   9/16/1997   Shelor   US-5,684,470   9/16/1997   Shelor   US-5,684,272   1/2/2/1998   Top ot al.   US-5,080,191   Shelor   US-6,080,191						
U.S. 4,894.612 17/15/1994 Drake et al. U.S. 5,346.531 80/1994 Clarke et al. U.S. 5,346.535 10/28/1988 Frick et al. U.S. 4,172,993 10/30/1979 Leach U.S. 6,963,027 10/5/1999 Peters U.S. 6,062,263 17/14/1999 Peters et al. U.S. 6,227,99 5/15/2001 Peters U.S. 6,002,263 17/14/1999 Peters et al. U.S. 6,232,799 5/15/2001 Peters et al. U.S. 6,232,799 11/10/1999 Yassine U.S. 6,043,667 3/28/2000 Cadwalader et al. U.S. 6,111,149 8/29/2000 Lefever et al. U.S. 6,144 7/23/2002 Hollman et al. U.S. 6,242,797 6/15/1993 Reilinger U.S. 6,244,141 7/23/2002 Hollman et al. U.S. 5,276,494 17/11/1994 Obigene U.S. 5,276,494 17/11/1994 Obigene U.S. 5,276,494 17/11/1994 Shamoulian et al. U.S. 5,276,494 17/11/1995 Shamoulian et al. U.S. 5,276,494 17/11/1996 Shamoulian et al. U.S. 5,276,494 17/11/1996 Shamoulian et al. U.S. 5,861,577 11 5/14/1996 Barnas et al. U.S. 5,861,565 10/1/1996 Barnas et al. U.S. 5,864,70 9/16/1997 Shelor U.S. 5,864,70 9/16/1997 Shelor U.S. 5,868,470 9/16/1997 Shelor U.S. 5,868,470 9/16/1997 Shelor U.S. 6,862,223 10/27/1999 Obikane et al. U.S. 6,031,383 2/29/2000 Hembre et al. U.S. 6,030,891 5/19/1997 Peter et al. U.S. 6,030,891 5/19/1999 Perry et al. U.S. 5,868,195 9/11/10/1999 Perry et al. U.S. 5,836,597 11/10/1999 Perry et al. U.S. 5,836,597 11/10/1999 Yassine U.S. 5,836,597 11/10/1999 Yassine U.S. 6,835,597 11/10/1999 Perry et al. U.S. 6,835,597 11/10/1999 Per						
US-5,34,9,91   8/2/1994   Clarke et al.						
US-3,006,565   10/20/1988			<del></del>			
US-4.172.993			US- 5,334,931	8/2/1994		
U.S. 5,683,027			US- 3,408,565	10/29/1968	Frick et al.	
US-6,002,263 12714/1999 Peters et al. US-6,232,790 5/15/2001 Bryan et al. US-6,232,790 11/10/1999 Vassine US-5,035,997 11/10/1999 Vassine US-5,035,997 11/10/1999 Vassine US-6,043,667 3/28/2000 Cadwallader et al. US-6,111,419 8/29/2000 Lefever et al. US-6,111,419 8/29/2000 Lefever et al. US-6,114,141 7/23/2002 Hollman et al. US-5,243,940 11/1994 Obigane US-5,220,277 6/15/1993 Relinger US-5,226,375 1/23/1996 Shellor US-5,486,975 1/23/1996 Shellor US-5,5486,975 1/23/1996 Shellor US-5,5486,975 1/23/1996 Shellor US-5,551,111 5/14/1996 Shelor US-5,551,111 5/14/1996 Federlin et al. US-5,572,398 11/5/1996 Federlin et al. US-5,572,398 11/5/1996 Federlin et al. US-5,582,225 10/27/1996 Obikane et al. US-5,828,225 10/27/1998 Obikane et al. US-6,031,383 2/29/2000 Straib et al. US-6,031,383 2/29/2000 Hembree et al. US-6,031,383 9/19/2000 Hembree et al. US-6,041,723 9/26/2000 Costello US-6,050,503 1/27/1999 Perry et al. US-5,530,371 6/26/1999 Perry et al. US-5,530,371 6/26/1999 Perry et al. US-5,632,633 5/13/1997 Perry et al. US-5,632,633 5/13/1997 Perry et al. US-5,033,3997 11/10/1999 Yassine US-5,035,3997 11/10/1999 Yassine US-5,035,3997 11/10/1999 Yassine US-5,035,3997 11/10/1999 Yassine US-6,031,393 2/29/2000 Streib et al. US-6,031,393 2/29/2000 Streib et al. US-6,034,393 2/29/2000 Streib et al. US-6,034,393 2/29/2000 Streib et al. US-6,035,3997 11/10/1999 Yassine US-5,035,997 11/10/1999 Yassine US-5,035,3997 11/10/1999 Yassine US-5,035,3997 11/10/1999 Yassine US-6,036,305 3/26/2002 Peters et al. US-6,036,305 3/26/2002 Peters et al. US-6,037,393 3/4/4999 Tracy et al. US-6,036,305 3/26/2002 Peters et al. US-6,037,393 3/4/2000 Milyazawa et al.			US- 4,172,993	10/30/1979	Leach	
U.S. 6,232,790			US- 5,963,027	10/5/1999	Peters	
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US- 6,043,667   3/28/2000   Cadwallader et al.			US- 5,835,997	11/10/1998		
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	US- 6,096,567	8/1/2000	Kaplan et al.	
	US- 6,137,303	10/24/2000	Deckert et al.	<del></del>
	US- 6,144,212	11/7/2000	Mizuta	
	US- 6,222,970	4/24/2001	Wach et al.	
	US- 6,501,289	12/31/2002	Takekoshi	
	US- 3,176,091	3/30/1965	Hanson et al.	
	US- 3,714,572	1/30/1973	Ham et al.	
	US- 3,970,934	7/20/1976	Aksu	
	US- 4,099,120	7/4/1978	Aksu	
	US- 4,115,735	9/19/1978	Stanford	
	US- 6,483,336	11/19/2002	Harris et al.	
	US- 6,424,141	7/23/2002	Hollman et al.	
	US- 6,445,202	9/3/2002	Cowan et al.	
	US- 3,814,888	6/4/1974	Bowers et al.	
	US- 5,218,185	6/8/1993	Gross	
	US- 6,424,141	7/23/2002	Hollman et al.	
	US- 6,104,203	8/15/2000	Costello et al.	
	US- 6,310,755	10/30/2001	Kholodenko et al.	
	US- 5,550,482	8/27/1996	Sano	
·	US- 5,610,529	3/11/1997	Schwindt	
	US- 6,002,263	12/14/1999	Peters et al.	
	US- 5,097,207	3/17/1992	Blanz	
	US- 6,198,299	3/6/2001	Hollman	
	US- 6,445,202	9/3/2002	Cowan et al.	
	US- 4,507,602	3/26/1985	Aguirre	· · · · · · · · · · · · · · · · · · ·
	US- 4,588,970	5/13/1986	Donecker et al.	<u> </u>
	US- 4,680,538	7/14/1987	Dalman et al.	<del></del>
	US- 4,703,433	10/27/1987	Sharrit	··· ·· ·· · · · · · · · · · · · · · ·
	US- 4,365,195	12/21/1982	Stegens	
	US- 3,201,721	8/17/1965	Voelcker	
	US- 4,810,981	3/17/1989	Herstein	
	US- 4,009,456	2/22/1977	Hopfer	
	US- 4,280,112	7/21/1981	Eisenhart	
	US- 4,346,355	8/24/1982	Tsukii	
	US- 3,662,318	5/9/1972	Decuyper	
	US- 3,775,644	11/27/1973	Cotner et al.	
	US- 4,816,767	3/28/1989	Cannon et al.	
	US- 4,853,613	8/1/1989	Sequeira et al.	
	US- 4,414,638	11/8/1983	Talambrias	
	US- 4,858,160	8/15/1989	Strid et al.	
	US- 4,896,109	1/23/1990	Rauscher	
	US- 4,933,634	6/12/1990	Cuzin et al.	
	US- 4,695,794	9/22/1987	Bargett et al.	
	US- 4,730,158	3/8/1988	Kasai et al.	1
	US- 3,265,969	8/9/1966	Catu	
	US- 4,838,802	6/13/1989	Soar	
	US- 4,923,407	5/8/1990	Rice et al.	
	US- 5,045,781	9/3/1991	Gleason et al.	
	US- 3,256,484	6/14/1966	Terry	-
	US- 5,070,297	12/3/1991	Kwon et al.	
	US- 5,144,228	9/1/1992	Sorna et al.	
	US- 5,198,756	3/30/1993	Jenkins et al.	
	US- 2,197,081	4/16/1940	Piron	
	US- 4,566,184	1/28/1986	Higgins et al.	
	US- 4,827,211	5/2/1989	Strid et al.	
	US- 4,918,374	4/17/1990	Stewart et al.	<del> </del>
	US- 4,994,737	2/19/1991	Carlton et al.	<del> </del>
	US- 5,065,092	11/12/1991	Sigler	
	US- 5,198,758	3/30/1993	Iknaian et al.	
	US- 5,657,394	8/12/1997	Schwartz et al.	<del> </del>
	US- 5,659,255	8/19/1997	Strid et al.	
	US- 5,869,975	2/9/1999	Strid et al.	
	US- 5,973,505	10/26/1999	Strid et al.	
	US- 6,130,544	10/10/2000	Strid et al.	<del></del>

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	US- 5,166,606	11/24/1992	Blanz	
,	US- 6,335,628	1/1/2002	Schwindt et al.	
	US- 6,489,789	12/3/2002	Peters et al.	
	US- 6,284,971	9/4/2001	Atalar et al.	
	US- 2,812,502	11/5/1957	Doherty	
	US- 4,365,109	12/21/1982	O'Loughlin	
	US- 4,479,690	10/30/1984	Inouye, et al.	
	US- 2,471,897	5/31/1949	Rappl	
	US- 3,435,185	3/25/1969	Gerard	
	US- 4,712,370	12/15/1987	MacGee	
	US- 4,918,279	4/17/1990	Babel et al.	
	US- 6,313,649	11/6/2001	Harwood et al.	
	US- 20010010468	8/2/2001	Gleason et al.	
	US- 20010030549	10/18/2001	Gleason et al.	
	US- 20030057513	4/17/2003	Alexander	
	US- 20030062915	4/3/2003	Amold et al.	
	US- 20030071631	4/17/2003	Alexander	
	US- 20050024069	2/3/2005	Hayden et al.	
<del> </del>	US- 4,352,061	9/28/1982	Matrone Smith Is at al.	
<del>-</del>	US- 5,066,357	11/19/1991 7/6/1993	Smyth, Jr. et al.	
	US- 5,225,037 US- 5,583,445	12/10/1996	Elder et al.  Mullen	
	US- 6,037,785	3/14/2000	Higgins	
<del></del>	US- 6,549,106	4/15/2003	Martin	
	US- 6,724,205	4/20/2004	Hayden et al.	
	US- 6,806,724	10/19/2004	Hayden et al.	
	US- 6,856,129	2/15/2005	Thomas et al.	
	US- 6,236,975	5/22/2001	Boe et al.	
	US- 6,236,977	5/22/2001	Verba et al.	
	US- 6,608,496	8/19/2003	Strid et al.	
	US- 5,960,411	9/28/1999	Hartman et al.	
	US- 6,029,141	2/22/2000	Bezos et al.	
	US- 6,639,415	10/28/2003	Peters et al.	
	US- 5,160,883	11/3/1992	Blanz	
	US- 6,492,822	12/10/2002	Schwindt et al.	
	US- 4,371,742	2/1/1983	Manly	
	US- 3,602,845	8/31/1971	Agrios et al.	
	US- 3,596,228	7/27/1971	Reed, Jr. et al.	
	US- 3,863,181	1/28/1975	Glance et al.	
	US- 4,027,253	5/31/1977	Chiron et al.	
	US- 4,697,143	9/29/1987	Lockwood et al.	
	US- 5,225,796 US- 6,023,209	7/6/1993 2/8/2000	Williams et al. Faulkner et al.	
	US- 3,654,573	4/4/1972	Graham	
	US- 4,186,338	1/29/1980	Fichtenbaum	
	US- 4,665,360	5/12/1987	Phillips	
	US- 5,010,296	4/23/1991	Okada et al.	
	US- 5,034,688	7/23/1991	Moulene et al.	
	US- 6,486,687	11/26/2002	Harwood et al.	
	US- 6,636,059	10/21/2003	Harwood et al.	
	US- 6,642,732	11/4/2003	Cowan et al.	
	US- 6,720,782	4/13/2004	Schwindt et al.	
	US- 6,777,964	8/17/2004	Navratil et al.	
	US- 6,801,047	10/5/2004	Harwood et al.	
	US- 20040113639	6/17/2004	Dunklee et al.	
	US- 6,774,651	8/10/2004	Hembree	
	US- 6,927,079	8/9/2005	Fyfield	
	US- 6,686,753	2/3/2004	Kitahata	
	US- 6,771,090	8/3/2004	Harris et al.	
	US- 5,515,167	5/7/1996	Ledger et al.	
<del></del>	US- 5,611,946	3/18/1997	Leong et al.	
	US- 5,666,063 US- 5,804,982	9/9/1997 9/8/1998	Abercrombie et al.	
	US- 5,831,442	11/3/1998	Lo et al. Heigl	
	US- 5,900,737	5/4/1999	Graham et al.	
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	US- 6,605,955	8/12/2003	Costello et al.	
···	US- 6,624,891	9/23/2003	Marcus et al.	
ļ	US- 6,836,135	12/28/2004	Harris et al.	
<b> </b>	US- 3,192,844	7/6/1965	Szasz et al.	
	US- 4,727,637	3/1/1988	Buckwitz et al.	
	US- 5,202,558	4/13/1993	Barker	
	US- 5,404,111	4/4/1995	Mori et al.	
	US- 5,408,189	4/18/1995	Swart et al.	
	US- 6,127,831	10/3/2000	Khoury et al.	
	US- 6,380,751	4/30/2002	Harwood et al.	
	US- 4,859,989	8/22/1989	McPherson	
	US- 4,871,883	10/3/1989	Guiol	
	US- 5,061,823	10/29/1991	Carroll	
	US- 5,107,076	4/21/1992	Bullock et al.	
	US- 5,214,243	5/25/1993	Johnson	
	US- 5,397,855	3/14/1995	Ferlier	
	US- 5,477,011	12/19/1995	Singles et al.	
	US- 5,729,150	3/17/1998	Schwindt	
	US- 6,847,219	1/25/2005	Lesher et al.	
	US- 2,142,625	1/3/1939	Zoethout	
· · ·	US- 3,230,299	1/18/1966	Radziejowski	
	US- 4,567,321	1/28/1986	Harayama	
	US- 4,621,169	11/4/1986	Petinelli et al.	
	US- 4,626,618	12/2/1986	Takaoka et al.	
	US- 4,642,417	2/10/1987	Ruthrof et al.	
<u> </u>	US- 5,486,975	1/23/1996	Shamouilian et al.	-
· · · · · · · · · · · · · · · · · · ·	US- 5,517,111	5/14/1996	Shelor	
	US- 5,561,585	10/1/1996	Barnes et al.	<del></del>
	US- 5,572,398	11/5/1996	Federlin et al.	<del></del>
	US- 5,617,035	4/1/1997	Swapp	<del></del>
	US- 5,668,470	9/16/1997	Shelor	
	US- 6,043,667	3/28/2000	Cadwallader et al.	
	US- 6,111,419	8/29/2000	Lefever et al.	-
l	US- 6,194,907	2/27/2001	Kanao et al.	-
	US- 5,103,169	4/7/1992	Heaton et al.	
			<del></del>	
	US- 5,221,905	6/22/1993	Bhangu et al.  Harwood et al.	
<u> </u>	US- 5,237,267	8/17/1993		<del></del>
<b>.</b>	US- 5,278,494	1/11/1994	Obigane	
	US- 5,315,237	5/24/1994	lwakura et al.	
ļ	US- 6,885,197	4/26/2005	Harris et al.	<del>-</del>
$\vdash$	US- 5,523,694	6/4/1996	Cole, Jr.	
<b>  </b>	US- 5,530,372	6/25/1996	Lee et al.	
$\vdash$	US- 5,675,499	10/7/1997	Lee et al.	
<b></b>	US- 5,777,485	7/7/1998	Tanaka et al.	
igwdows	US- 5,804,983	9/8/1998	Nakajima et al.	
	US- 5,892,539	4/6/1999	Colvin	
<b></b>	US- 5,999,268	12/7/1999	Yonezawa et al.	
	US- 6,002,426	12/14/1999	Back et al.	
	US- 6,049,216	4/11/2000	Yang et al.	
	US- 6,052,653	4/18/2000	Mazur et al.	
	US- 6,060,888	5/9/2000	Blackham et al.	
	US- 6,078,183	6/20/2000	Cole, Jr.	
	US- 6,118,894	9/12/2000	Schwartz et al.	
	US- 6,124,725	9/26/2000	Sato	
	US- 6,232,787	5/15/2001	Lo et al.	
	US- 4,287,473	9/1/1981	Sawyer	
	US- 4,684,883	8/4/1987	Ackerman et al.	
	US- 4,755,874	7/5/1988	Esrig et al.	
	US- 4,772,846	9/20/1988	Reeds	
	US- 5,030,907	7/9/1991	Yih et al.	
L 1	00 0,000,001			
	US- 5,089,774	2/18/1992	Nakano	
		2/18/1992 5/28/1991	Nakano Nbedi et al.	

.

.

	LUD 5 475 040	40404005	11. 1- 1-1	
	US- 5,475,316	12/12/1995	Hurley et al.	
	US- 5,479,109	12/26/1995	Lau et al.	
	US- 5,493,236	2/20/1996	Ishii et al.	
	US- 20040251922	12/16/2004	Martens et al.	
	US- 6,621,082	9/16/2003	Morita et al.	
	US- 6,633,174	10/14/2003	Satya et al.	
	US- 6,643,597	11/4/2003	Dunsmore	
	US- 6,701,265	3/2/2004	Hill et al	
	US- 6,710,798	3/23/2004	Hershel et al.	
	US- 6,724,928	4/20/2004	Davis	
	US- 6,734,687	5/11/2004	Ishitani et al.	
	US- 6,744,268	6/1/2004	Hollman	
	US- 6,771,806	8/3/2004	Satya et al.	
	US- 6,788,093	9/7/2004	Aitren et al.	
	US- 6,838,885	1/4/2005	Kamitani	
	US- 20040061514	4/1/2004	Schwindt et al.	
	US- 20040095145	5/20/2004	Boudiaf et al.	
	US- 20040100276	5/27/2004	Fanton	
	US- 20040162689	8/19/2004	Jamneala et al.	
	US- 20040193382	9/30/2004	Adamian et al.	
	US- 20040199350	10/7/2004	Blackham et al.	
	US- 20040207424	10/21/2004	Hollman	
	US- 6,300,775	10/9/2001	Peach et al.	1
	US- 6,320,396	11/20/2001	Nikawa	<del>                                     </del>
<del></del>	US- 6,396,296	5/28/2002	Tarter et al.	
	US- 6,483,327	11/19/2002	Bruce et al.	
	US- 6,488,405	12/3/2002	Eppes et al.	
	US- 6,549,022	4/15/2003	Cole, Jr. et al.	
	US- 6,573,702	6/3/2003	Marcuse et al.	
	US- 6,605,951	8/12/2003	Cowan	
	US- 6,608,494	8/19/2003	Bruce et al.	
	US- 6,617,862	9/9/2003	Bruce	
	US- 6,257,319	7/10/2001	Kainuma et al.	
	US- 4,557,599	12/10/1985	Zimring	
	US- 4,575,676	3/11/1986	Palkuti	
	US- 3,810,017	5/7/1974	Wiesler et al.	
	US- 4,818,169	4/4/1989	Schram, deceased, et al.	
	US- 4,893,914	1/16/1990	Hancock et al.	
		6/30/1998	Markowski et al.	· · · · · · · · · · · · · · · · · · ·
	US- 5,773,951	8/24/1999		
	US- 5,942,907	<u> </u>	Chiang Takahashi et al.	
	US- 5,552,716	9/3/1996		
	US- 5,640,101	6/17/1997	Kuji et al.	
	US- 5,731,708	3/24/1998	Sobhami	
	US- 3,996,517	12/7/1976	Fergason et al.	<del></del>
ļ	US- 5,491,426	2/13/1996	Small	
	US- 6,198,299	3/6/2001	Hollman	
	US- 4,528,504	7/9/1985	Thornton Jr., et al.	ļ
	US- 5,952,842	9/14/1999	Fujimoto	
	US- 5,910,727	6/8/1999	Fujihara et al.	
ļ	US- 4,856,426	8/15/1989	Wirz	ļ
	US- 5,198,752	3/30/1993	Miyata et al.	
	US- 5,172,049	12/15/1992	Kiyokawa et al.	<u> </u>
	US- 5,198,753	3/30/1993	Hamburgen	
	US- 5,065,089	11/12/1991	Rich	<u> </u>
	US- 4,982,153	1/1/1991	Collins et al.	
	US- 4,787,752	11/29/1988	Fraser et al.	
	US- 6,259,261	7/10/2001	Engelking et al.	
	US- 5,422,574	6/6/1995	Kister	
	US- 4,884,206	11/28/1989	Mate	
	US- 20010009377	7/26/2001	Schwindt et al.	
	US- 4,839,587	6/13/1989	Flatley et al.	
l	US- 6,001,760	12/14/1999	Katsuda et al.	
	US- 5,916,689	6/29/1999	Collins et al.	
	03- 3,310,003	5/20, 1000		<u> </u>
	US- 5,874,361	2/23/1999	Collins et al.	

	US- 5,280,156 US- 6,114,865	1/18/1994	Niori et al.	
•	US- 6,114,865			<del></del>
	1772	9/5/2000	Lagowski et al.	
4	US- 5,565,788	10/15/1996	Burr et al.	
<b></b>	US- 5,506,515	4/9/1996	Godshalk et al.	
	US- 5,373,231	12/13/1994	Boll et al.	
	US- 5,041,782	8/20/1991	Marzan	
	US- 4,849,689	7/18/1989	Gleason	
	US- 5,510,792	4/23/1996	Ono et al.	
	US- 6,292,760	9/18/2001	Burns	
	US- 5,511,010	4/23/1996	Burns	
<u> </u>	US- 5,488,954	2/6/1996	Sleva et al.	
	US- 5,451,884	9/19/1995	Sauerland	
	US- 4,093,988	6/6/1978	Scott	
	US- 6,091,236	7/18/2000	Piety et al.	
	US- 5,995,914	11/30/1999	Cabot	
	US- 5,883,523	3/16/1999	Ferland et al.	
	US- 5,847,569	12/8/1998	Ho et al.	
	US- 5,142,224	8/25/1992	Smith et al.	
	US- 4,916,398	4/10/1990	Rath	
	US- 4,744,041	5/10/1988	Strunk et al.	
	US- 4,646,005	2/24/1987	Ryan	
	US- 4,275,446	6/23/1981	Blaess	
	US- 20010020283	9/6/2001	Sakaguchi	
	US- 6,211,663	4/3/2001	Moulthrop et al.	
	US- 5,949,579	9/7/1999	Baker	·
	US- 4,425,395	1/10/1984	Negishi et al.	
	US- 4,711,563	12/8/1987	Lass	
	US- 5,675,932	10/14/1997	Mauney	
	US- 5,807,107	9/15/1998	Bright et al.	
	US- 5,848,500	12/15/1998	Kirk	
	US- 6,013,586	1/11/2000	McGhee et al.	
	US- 4,284,682	8/18/1981	Frosch et al.	
	US- 1,337,866	4/20/1920	Whitaker, deceased	
	US- 2,376,101	5/15/1945	Tyzzer	
	US- 3,193,712	7/6/1965	Harris	
	US- 3,484,679	12/16/1969	Hodgson et al.	
	US- 3,866,093	2/11/1975	Kusters et al.	
	US- 4,376,920	3/15/1983	Smith	
	US- 4,487,996	12/11/1984	Rabinowitz et al.	
	US- 5,095,891	3/17/1992	Reitter	
	US- 5,539,323	7/23/1996	Davis, Jr.	
	US- 6,034,533	3/7/2000	Tervo et al.	
	US- 6,137,302	10/24/2000	Schwindt	
	US- 6,147,851	11/14/2000	Anderson	
	US- 6,480,013	11/12/2002	Nayler et al.	
	US- 5,998,768	12/7/1999	Hunter et al.	
	US- 6,028,435	2/22/2000	Nikawa	
	US- 6,078,183	6/20/2000	Cole, Jr.	<del>-  </del>
	US- 6,091,255	7/18/2000	Godfrey	1
	US- 6,160,407	12/12/2000	Nikawa	
	US- 6,245,692	6/12/2001	Pearce et al.	1
<del>-</del>	US- 2002/0118009	8/29/2002	Holiman et al.	<del></del>

	FOREIGN PATENT DOCUMENTS							
		Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,			
Examiner Initials*	Cite No. <sup>1</sup>	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if MM-DD- known)		Applicant of Cited  Document	Where Relevant Passages or Relevant Figures Appear	Т <sup>6</sup>		
		DD 288 234						
		DE 31 14 466	3/11/1982					
		DE 196 16 212	10/31/1996					
		DE 693 22 206						
		DE 195 41 334	9/19/1996					
		DE 196 18 717	01/15/1998					
		DE 29 12 826						

	DE 31 25 552	11/11/1982		Τ	τ
· · · · · · · · · · · · · · · · · · ·	DE 41 09 908	10/01/1992			<del></del>
· · · · · · · · · · · · · · · · · · ·	DE 41 09 908	11/17/1994			
	DE 94 06 227	11/1/1954		· <del>  </del>	+
	EP 0 201 205	40/47/4006			
<del> </del>		12/17/1986			∔
	EP 0 573 183	1/7/1999		<del></del>	
	EP 0 087 497	9/7/1983			
	EP 0 314 481	5/3/1989			
	EP 0 333 521	9/20/1989			<del> </del>
	EP 0 460 911	12/11/1991			<del> </del>
	EP 0 505 981				<del> </del>
	EP 0 574 149	12/15/1993			<del> </del>
	GB 2 197 081	5/11/1988			
	JP 1-209380	8/23/1989	<del></del>		
	JP 2-22873	1/25/1990		- <del></del>	<del> </del>
	JP 2-220453	9/3/1990			ļ
	JP 4-732				
	JP 2001-189285	7/10/2001			
	JP 2001-189378	7/10/2001			
	JP 2002-164396	6/7/2002			
	JP 1-165968	6/29/1989			1
	JP 1-214038	8/28/1989			
	JP 1-219575	9/1/1989			
	JP 1-296167	11/29/1989			
	JP 3-175367	7/30/1991			
	JP 5-157790	6/25/1993			
	JP 5-166893	7/2/1993			
	JP 60-71425	3/15/1994			
	JP 7005078	1/10/1995			
	JP 10-116866	5/6/1998			
	JP 11-031724	2/2/1999			
	JP 53-052354	5/12/1978			
	JP 56-007439	1/26/1981			
	JP 62-011243	1/20/1987			
	JP 63-143814	6/16/1988			
	JP 3-67187	3/22/1991			
	JP 10-339743	12/22/1998			
	JP 1-178872	7/17/1989			
	JP 2-22837	1/25/1990			
	JP 7-5197	1/10/1995			
	JP 7-273509	10/20/1995			
	JP 63-160355	7/4/1988			
	JP 2002033374	1/31/2002			
	WO 01/69656	9/20/2001			
	WO 80/00101	1/24/1980			T
	WO 86/07493	12/18/1986	·		
	WO 89/04001	5/5/1989			
	WO 2004/049395	6/10/2004	<del></del>		
					1

1	Examiner Signature		Date Considered	

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Attorney Docket Number

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	···	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		CHRISTOPHE RISACHER, VESSEN VASSILEV, ALEXEY PAVOLOTSKY, AND VICTOR BELITSKY, "Waveguide-to-Microstrip Transition With Integrated Bias-T," IEEE Microwave and Wireless Components Letters, Vol. 13, No. 7, July 2003, pp. 262-264.	
		JOHN A. MODOLO, GORDON WOOD ANDERSON, FRANCIS J. KUB, AND INGHAM A.G. MACK, "Wafer level high-frequency measurements of photodetector characteristics," Applied Optics, Vol. 27, No. 15, August 1, 1988, pp. 3059-3060.	
		CASCADE MICROTECH, "Introducing the peak of analytical probe stations," MicroProbe Update, May 1990.	
,,		HJ. EUL AND B. SCHIEK, "Thru-Match-Reflect: One Result of a Rigorous Theory for De-Embedding and Network Analyzer Calibration," 18 <sup>th</sup> Euopean Microwave Conference '88, The International Conference Designed for the Microwave Community, Published by Microwave Exhibitions and Publishers Limited, September 12-16, 1988, Stockholm, Sweden.	
		CASCADE MICROTECH, "Analytical Probe Station," Summit 9000 Series, June 1, 1990.	
		MAURY MICROWAVE CORPORATION, "MT950D Series, Transistor Test Fixture Software, Software Application Packs," Sept. 20, 1982	
		Signatone S-1240 Thermal Controller, 2 page description.	
		ERIC PHIZICKY, PHILIPPE I.H. BASTIAENS, HENG ZHU, MICHAEL SNYDER, & STANLEY FIELDS, "Protein analysis on a proteomic scale," Nature 422, insight: review article, March 13, 2003.	
		THE MICROMANIPULATOR COMPANY, "Semi-Automatic Probing Stations and Accessories," pp. 1-12	
		INTEGRATED TECHNOLOGY CORPORATION, "Probilt PB500A Probe Card Repair and Analysis Station," 4 pages.	
		BRIAN J. CLIFTON, "Precision slotted-Line Impedance Measurements Using computer Simulation for Data Correction," IEEE Transactions on Instrumentation and Measurement, Vol. IM-19, No. 4, November 1970, pp. 358-363.	
		ERIC STRID (CASCADE MICROTECH), "Planar Impedance Standards and Accuracy Considerations in Vector Network Analysis," June 1986, 8 pages.	
		J. MARTENS, ANRITSU COMPANY, 490 JARVIS DRIVE, MORGAN HILL, CA 95037, "Multiport SOLR Calibrations: Performance and an Analysis of some Standards Dependencies," pp. 205-213.	
		MAURY MICROWAVE CORPORATION, "MT950 Series Transistor Test Fixture (TTF) NOTICE! NOTICE! NOTICE!," May 31, 1985	
		MAURY MICROWAVE CORPORATION, "MT950 Series Transistor Test Fixture (TTF), October 7, 1982, 4 pages.	
, <u>,</u>		TEMPTRONIC CORPORATION, "Model TPO3000 Series ThermoChuck Systems for Probing, Characterization and Failure analysis of Wafers, Chips and Hybrids at High and Low Temperatures," pp. 2-5.	
		CASCADE MICROTECH, "Model 42/42D Microwave Probe Station Instruction Manual, Electrical Operation," pp. 4-1 – 4-42.	
		INTER-CONTINENTAL MICROWAVE, "Microwave Semiconductor Chip Measurements using the HP 8510B TRL-Calibration Technique," Application Note: 101	
-		DESIGN TECHNIQUE, "Microstrip Microwave Test Fixture," May 1986, 2 pages.	

	PHOTO: Micromanipulator Probe Station 1994	
	MICROMANIPULATOR SALES AND SERVICES INC., "Test Station Accessories," Copyright 1983, 1984, 1 page.	
	RUEDI AEBERSOLD & MATTHIAS MANN, "Insight Review Articles, Mass spectrometry-based proteomics," Nature, Vol. 422, March 13, 2003, pp. 198-207.	
	KEITHLEY INSTRUMENTS, INC. "Low-Level Measurements for Effective Low Current, Low Voltage, and High Impedance Measurements," Revised Third Edition, Printed June 1984.	
	INTER-CONTINENTAL MICROWAVE, 2370-B Walsh Avenue, Santa Clara, CA 95051, "Product Catalog,"	
	HEWLETT PACKARD, "HP 4284A Precision LCR Meter Operation Manual (Including Option 001,002,006,201,202,301)," Third Edition, December 1991, pp. 2-1, 6-9, 6-15.	
	CLETUS A HOER, "A High-Power Dual Six-Port Automatic Network Analyzer Used in Determining Biological Effects of RF and Microwave Radiation," IEEE Transactions on Microwave Theory and Techniques, Vol. MTT-29, No. 12, December 1981	
	No. 12, December 1981.  CASCADE MICROTECH TECHNICAL BRIEF," A Guide to Better Vector Network Analyzer Calibrations for Probe- Tip Measurements, Copyright 1994, 2 pages.	
	TEMPTRONIC, "Guarded" Chuck Sketch, November 15, 1989	
	ARTHUR FRASER, REED GLEASON, E.W. STRID, "GHz On-Silicon-Wafer Probing Calibration Methods," Cascade Microtech Inc. P.O. Box 1589, Beaverton, OR 97075-1589, pp. 5-8	
	ANDREJ SALI, ROBERT GLAESER, THOMAS EARNEST & WOLFGANG BAUMEISTER, "From words to literature in structural proteomics," Insight: Review Article, Nature 422, pp. 216-225, March 13, 2003.	-
	MIKE TYERS & MATTHIAS MANN, "From genomics to proteomics," Insight overview, Nature Vol. 422 March 2003, pp. 193 – 197.	
	WILLIAM KNAUER, "Fixturing for Low-Current/Low-Voltage Parametric Testing," Evaluation Engineering, November 1990, pp. 9-12.	
	J.D.TOMPKINS, "Evaluating High Speed AC Testers," IBM Technical Disclosure Bulletin, Vol. 13, No. 7 December 1970, p.180.	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	JIM FITZPATRICK, "Error Models for Systems Measurement," Microwave Journal, May 1978, pp. 63-66.	
	SAM HANASH, "Disease proteomics," Insight Review Articles, Nature, Vol. 422, March 13, 2003, pp. 226 – 232.	
	DESIGN TECHNIQUE INTERNATIONAL, "Adjustable Test Fixture," Copyright 1988.	
	RONALD F. BAUER & PAUL PENFIELD, JR., " De-Embedding and Unterminating," IEEE Transactions on Microwave Theory and Techniques, Vol. MTT-22, No. 3, March 1974, pp. 282-288.	
	Cross Section – Signatone S-1240 Sketch, Advertised & Sold 1987-1988.	
	YOUSUKE YAMAMOTO, "A Compact Self-Shielding Prober for Accurate Measurement of On-Wafer Electron Devices," IEEE Transactions on Instrumentation and Measurement, Vol. 38, No. 6, December 1989, pp. 1088 – 1093.	
	R. Y. KOYAMA & M. G. BUEHLER, "Semiconductor Measurement Technology: A Wafer Chuck for Use Between –196 and 350° C, "U.S. Department of Commerce, National Technical Information Service, PB-293 298, Issued January 1979.	
	KEN COLE, "ThermoChuck Performance (Fax)," 2 pages, March 10, 1995.	
	S. BECK & E. TOMANN, "Chip Tester," IBM Technical Disclosure Bulletin, January 1985.	
	APPLIED PRECISION, "Checkpoint," 2 pages, 8505 SE 68 <sup>th</sup> Street, Mercer Island, Washington 98040.	
	L. L. SOHN, O. A. SALEH, G. R. FACER, A. J. BEAVIS, R. S. ALLAN, & D. A. NOTTERMAN, "Capacitance Cytometry: Measuring biological cells one by one," PNAS Vol. 97, No. 20 September 26, 2000, pp. 10687-10690.	
	DANIEL VAN DER WEIDE, "THz Frequency Science & Technology Biomolecular Interaction Sensing with Sub- Terahertz Fields," University of Wisconsin-Madison, 2 pages.	
	MARK S. BOGUSKI & MARTIN W. MCINTOSH, "Biomedical informatics for proteomics," Insight: review article, Nature 422, March 13, 2003, pp. 233-237.	Ī

<del></del>	
•	SASWATA BASU & REED GLEASON, *A Membrane Quadrant Probe for R&D Applications,* Cascade Microtech, Inc. 14255 SW Brigadoon Ct., Beaverton, OR 97005, 3 pages.
	THE MICROMANIPULATOR COMPANY, INC., "Model 8000 Test Station," 1986, 1 page.
	THE MICROMANIPULATOR COMPANY, INC. "Model 8000 Test Station," 1988, 1 page.
	"Vacuum," Mechanical Operation, pp. 3-8 - 3-9.
	THE MICROMANIPULATOR COMPANY, INC., "Accessories: Hot and Hot/Cold Chucks, Integrated Dry environments, Triaxial chucks, Integrated Shielded and Dark environments, Probe Card Holders," page 8.
	Microwave Products, Microwave Journal, September 1988, 1 page.
	CASCADE MICROTECH, "Advanced On-Wafer Device Characterization Using the Summit 10500," pp. 2-20.
	SASWATA BASU & LEONARD HAYDEN, "An SOLR Calibration for Accurate Measurement of Orthogonal On-Wafer Duts," IEEE MTT-S Digest, 1997, pp. 1335-1336, 1338.
	HEWLETT PACKARD, "HP 4142B Modular DC source/Monitor Practical Applications—High Speed DC Characterization of Semiconductor Devices from Sub pA to 1A," November 1987, pp. 1-4.
	DOUG RYTTING, "Appendix to an Analysis of Vector Measurement Accuracy Enhancement Techniques," pp. 1-42, Hewlett Packard.
	TEMPTRONIC CORPORATION, "Application Note 1 Controlled Environment Enclosure For low temperature wafer probing in a moisture-free environment," 2 pages.
	CASCADE MICROTECH, INC. vs. MICROMANIPULATOR COMPANY, INC., "Deposition of Harry F. Applebay," United States District Court for the District of Oregon, Lead Case No. 97-479-AI.
	FLEXION CORPORATION, "Cryotest Station MP-3," CASCADE MICROTECH, INC. vs. MICROMANIPULATOR COMPANY, INC., Applebay Exhibit 576, May 13, 1998, 68 pages.
	FLEXION CORPORATION, "Cryotest Station MP-3," CASCADE MICROTECH, INC. vs. MICROMANIPULATOR COMPANY, INC., Applebay Exhibit 578, May 13, 1998, 1 page
	CASCADE MICROTECH, INC. vs. MICROMANIPULATOR COMPANY, INC., Applebay Exhibit 572, May 13, 1998, 2 pages.
	CASCADE MICROTECH, INC. vs. MICROMANIPULATOR COMPANY, INC., Applebay Exhibits 581A, 581B, and 581C, May 13, 1998, 3 pages.
	FLEXION CORPORATION, "AP-1 Cryotest Station," Applebay Exhibit 582, May 13, 1998, 20 pages.
	FLEXION CORPORATION, "AP-1 Cryotest Station User Manual," Applebay Exhibit 583, May 13, 1998, 187 pages.
	CASCADE MICROTECH, INC. vs. MICROMANIPULATOR COMPANY, INC., Applebay Exhibits 577A, 577B, 577C, May 13, 1998, 3 pages.
	CASCADE MICROTECH, INC. vs. MICROMANIPULATOR COMPANY, INC., Applebay Exhibit 585, May 13, 1998, 7 pages.

١	Examiner Signature	Date Considered	
	Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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